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ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XVII, NO. 10

OCTOBER 1976



"RF"

ORANGE COUNTY AMATEUR RADIO CLUB

OCT. 1976

-- 1976 CLUB OFFICERS --

PRESIDENT	MARTIN RAYMOND	WB6PEX	532-4090
VICE PRESIDENT	FRIED HEYN	WA6WZO	549-8516
TREASURER	FRANK GREGG	WB6KJS	968-1450
SECRETARY	GENE ZWEIGLE	W6SNR	995-6014
ACTIVITIES	KEN KONECHY	W6HHC	541-6249
MEMBERSHIP	KEI YAMACHIKA	W6NGO	538-8942
PUBLICITY	BOB ECKWEILER	WB6QNU	639-5074
TVI	TED GLICK	K6LJA	542-1390
M.A.L.	ART SHELDON	WA6LHB	997-3735
	ERNIE FUERTE	WA6GXV	839-7107

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EDITOR	BOB MALLER	WB6AJV	832-6170
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Meeting: Third Friday of each month at Mercury Savings and Loan, 1095 Irvine Blvd, Tustin, CA at 7:30 pm.

Nets: Wednesday, 7:00 pm. 21.175 MHz CW, and 8:00 pm. 21.375 MHz SSB. All stations are welcome to check in.

Breakfast: First Saturday of each month, 8:30 am. at Barnabys Coffee Shop, 144 S. Tustin Ave., Orange CA.

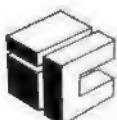
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CALLBOOK SERVICE

The club has copies of the latest U.S. and foreign callbooks which are available at each meeting. Also you can contact Ken Konechy - W6HHC at home (541-6249) on Friday evenings between 7pm and 9pm if you need addresses. If you have more than one call for Ken to check, he'll get them all and call you back the same night. Also, you can usually catch Ken on the air after the Wednesday evening club net.

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Some or all of the prizes at the meetings are provided through the courtesy of the stores listed below. Your patronage is encouraged to maintain their generosity.



(714) 987-5343

GREG ELMASSIAN

I.C. ELECTRONIC SUPPLY

STATE OF THE ART FOR: R&D - INDUSTRY - EXPERIMENTER  
619 W. KATELLA AVE., ORANGE, CALIFORNIA 92667

931 North Euclid Avenue, Anaheim, California 92801

Walt Henry, Sr. W6ZN  
931 N. Euclid Ave.  
Anaheim, California 92801  
(714) 772-9200 / (213) 430-7997

Henry Radio

714/772-9200 - 213/430-7997

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THE PREZ SEZ:

Our annual auction is nearly here, and I for one look forward most anxiously to this event. It seems to me, that an auction of this type does much for ham radio. It's just possible, that that special variable capacitor, linear tube, meter or whatever-else-you-may-have-been-searching-for has found its way, off someones shelf to the Orange County Amateur Radio Club's auction. Or maybe that piece of gear that you no longer have any use for is the very thing another has been looking for.

Remember there are a lot of new hams that might not want to spend the money right now for a new antenna, tower or receiver and that old DX-60 is just the thing for him (or her). (At another club's auction I once missed a chance to pick up a Henry 2K for a price you would not believe.)

You can help the club greatly if you encourage others to participate. Members or not, all are welcome to sell or bid on any item. All-in-all, it's a lot of fun and promotes ham radio. So when our auctioneer sounds his gavel on October 15th at our regular meeting place, be sure to be there.

I'm QRT so,

"73's"

Martin

P.S. Next month is election of officers. So be thinking of those who you would like to see serve the club in 1977. And let me know of your recommendations (532-4090). How about you becoming an officer of the club?

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PSST...WANNA BUY A TICKET?

The sale of general class amateur licenses is being checked by the FBI in Indianapolis and possibly other cities. An article in the Indianapolis Star describes a supposed ring of Amateurs who were telling prospective Amateurs that "they can bypass rigorous testing procedures by purchasing a General Class ham license for \$200" from the gang.

A "Mr. Big" in the operation is described in the article as "a government employee in Pennsylvania" who has access to the FCC computers and, for a price, is "willing to feed the data into the computers to make sure a license will be issued."

The FBI's Agent in Charge in Indianapolis confirmed that an investigation is in progress but had no futher details. Contacts at the FCC in Washington were not aware of either the story or the newspaper's report of it. Apparently a number of Indianapolis area Amateurs have been visited by the FBI investigators, and one of them said that an agent told him the Indianapolis investigation is "just the tip of the iceberg!"

from Ham Radio magazine

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SANDI'S CORNER

Thanks to Mary Ann, WN6IRR, Kathy, WN6KFJ, Pepper, WN6ORW and Cheryl, W6AKN for giving me a contact in my first YLRL "Howdy Days Contest".

Everyone had a nice time at the club fishing trip; ask Bob, WB6QNU, about the one that got away.

Former members Jerri, WA6QFO, and Al, WA6QFN, will be going to South Africa for at least 3 years; please note there ad in this issue. (Keep the rig. How about a sked??? ... the Editor)

Congratulations to John Griggs, W6KW for re-election as the Director of the South Western Division of ARRL.

Thanks go to Alex, W6RE, for the relay of the ARRL Bulletins on the Wednesday night club net.

Good to hear Jim, WB6YNR, check in to the net. We have missed you at the meetings: hope you can find transportation.

Gene, W6SNR, is getting settled in his new QTH and anxious about getting his quad up. Anyone have a small tower for sale?

Ernie, WA6FOW, is taking a trip for one month to the South of the US - including Florida & Virginia where he has relatives. Our auction will not seem the same without him this month.

Terry, WB6IHZ, will have more QRM around the house: Dixie his XYL is expecting their second harmonic.

If you are having stereo problems ask Lloyd, WB6ULU, about using ferrite beads in solving your interference problems.

Congratulations to Ben, WB6PNN, on his new ticket. Hope to catch him on 2 meters one of these days. Jeannine (Ben's XYL) will soon be going for her ticket also.

Carter, WA6MGI, would like to thank Kei, W6NGO, Fried, WA6WZO, and Ken, W6HHC, for helping him with his new tower.

Ryan, WB6DXS, who had his advanced at the age of 14 years old is helping his father become a ham. How is that for a switch.

Santa Claus has given me advanced information on the club's family Christmas dinner. This year it will be held on Sunday, December 19, at the Crossroads Restaurant in Fountain Valley.

BCNU,  
88,  
Sandi; WA6WZN

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ARE YOU SERVING YOUR CLUB, OR ARE YOU A POOP?

OCARC consists of probably the greatest number of hard-working members than any other radio club in the country. Do you count yourself amongst this enthusiastic bunch, who seem to get more out of their hobby because they give more? If not, try running for office. There are many positions available so why not give it a try. You just might enjoy your hobby more.

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AUCTION!

The auction meeting of the Orange County Amateur Radio Club will be held on Friday evening, October 15 at 7:30 PM. The location of the auction will be the normal club site at: MERCURY SAVINGS and LOAN BUILDING, 1095 Irvine Blvd., in the city of Tustin (about 100 yards east of the intersection of Irvine Blvd. and Newport Blvd).

AUCTION RULES

Plan to be on hand at the October meeting as we are holding the OCARC Annual Auction. A few rules adopted by the Board for this year's auction are as follows:

1. There will be a seller's registration fee of 10% of the listed minimum acceptable bid to a \$1.00 maximum. Example: 3 items with a minimum bid of \$6.00, seller registration fee is .60 cents. Three items with a minimum bid of \$15.00, seller registration fee is \$1.00. This should be paid to Frank, WB6KJS, upon arrival. The maximum registration fee a seller will have to pay is \$1.00.
2. After receipt of sellers registration fee, Frank will assign each seller with a seller's number. This number will be used in conjunction with an item number to identify all items to be sold. (For example: A seller is assigned a seller's number of #5 and he has 5 items for auction. His items will be tagged as items 5-1, 5-2, 5-3, 5-4, and 5-5. The first half of the number being the seller's number, and the other half being the item number).  
Other information to be written on each tag will be the seller's name and call and minimum acceptable bid. Please provide your own tags.
3. The Club's AUCTION SALE FEE will be 10% of all monies received by a seller, with a maximum of \$5.00 per auction item.
4. Only three items at a time will be offered for auction from each seller's lot on the initial go-around. Thereafter, the auctioneer will commence auctioning all remaining items of each seller.
5. If the seller cannot stay until the end of the auction he may pick up his monies at the next meeting.

For any further information contact Martin, WB6PEX, (532-4090) or Ken, W6HHC, (541-6249). Items should be limited to an electronics nature.

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## A WOM FROM SIGNETICS

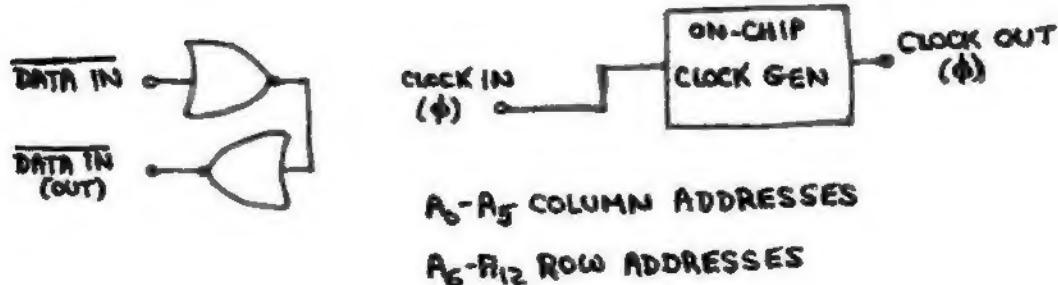
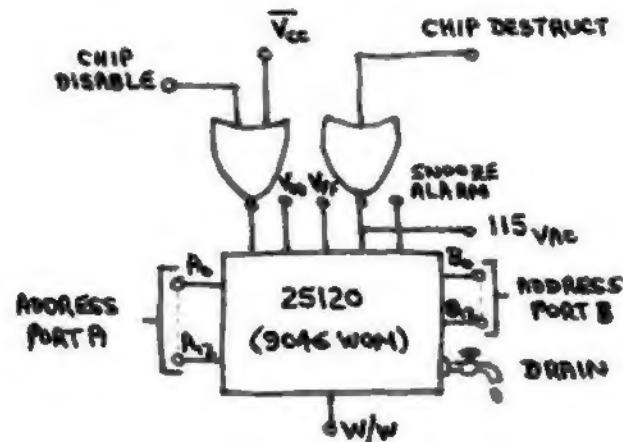
I normally don't cover important new products in the Orange County Amateur Radio Club newspaper. But the new Signetics WOM, I felt, deserves special attention. It is described in a recent data sheet for the 25120, a fully encoded 9046 X N, random-access, write-only memory. Signetics points out that this is a final specification--and adds the footnote, "until we get a look at some actual parts."

The product is sufficiently unusual to merit substantial abstracting from the data sheet with only slight modification. It follows:

## DESCRIPTION

The Signetics 25000 Series 9046 X N Random-Access Write-Only Memory employs both enhancement and depletion mode, p-channel, n-channel and neu<sup>1</sup> channel MOS devices. Although a static device, a single TTL-level clock phase is required to drive the onboard multiport clock generator. Data refresh is accomplished during CB<sup>2</sup> and LH<sup>2</sup> periods. Quadrastate outputs (when applicable) allow expansion in many directions, depending on organization.

The static memory cells are operated dynamically to yield extremely low power dissipation. All inputs and outputs are directly TTL compatible when proper interfacing circuitry is employed. Device construction is more or less SOS<sup>3</sup>.



## FEATURES

Fully encoded multiport addressing

Write cycle time 80 ns (max. typ.)

Write access time<sup>4</sup>

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Cell refresh time 2 ms (min. typ.)

TTL/DTL compatible inputs<sup>5</sup>

Available outputs, n

Clock capacitance 2pF max.<sup>6</sup>

V<sub>CC</sub> = +10 V

V<sub>DD</sub> = 0 V  $\pm$  2%

V<sub>FF</sub> = 6.3 V ac

#### APPLICATIONS

Don't care buffer stores

Least-significant control memories

Post-mortem memories (Weapons systems)

Artificial-memory systems

Non-intelligent micro controllers

First-In Never-Out (FINO) asynchronous buffers

Overflow register (bit bucket)

#### PROCESS TECHNOLOGY

The use of the unique  $SEX_8^7$  process yields V<sub>th</sub> (var.) and allows the design and production of higher performance than can be obtained with competitors' techniques.

#### BIPOLAR COMPATIBILITY

All data and clock inputs plus applicable outputs will interface directly or nearly directly with bipolar circuits of suitable characteristics. In any event, use 1-amp fuses in all power-supply and data lines.

#### INPUT PROTECTION

All terminals are provided with slip-on latex protectors for the prevention of Voltage Destruction. (Pill packaged devices do not require protection.)

#### SILICONE PACKAGING

Low-cost silicone DIP packaging assures reliability by the use of non-hermetic sealing which prevents entrapment of harmful ions while allowing the free exchange of friendly ions.

#### SPECIAL FEATURE

Because of the employment of the Signetics proprietary Sander-son-Rabbit Channel, the 25120 will provide 50% higher speed than you will obtain.

#### COOLING

The 25120 is easily cooled by employment of a six-foot fan, 1/2 inch from the package. If the device fails, you have exceeded the ratings. In such cases, more air is recommended.

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1. Neu channel devices enhance or deplete regardless of gate polarity.
2. Coffee Breaks and Lunch Hours.
3. Copyright U.S. Army Commissary, 1940.
4. Not applicable.

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- 5. These inputs can somehow be driven from TTL. The method is obvious.
- 6. Measured at 1. MHz, 25 mV ac, 1.9 pF in series.
- 7. Signetics EXtra secret.
- 8. See "Modern Production Techniques" by T. Arrieta (not yet written).

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courtesy of Electronic Design

#### RANDOM NOTES

HR Reports notes that WARC preparations are undertaking to strengthen the definition of amateur radio, considering requesting codeless amateur radio licenses down to 50 or even 29 MHz, may submit a technical question to the CCIR for consideration, and they established a new task force to develope an amateur radio spectrum ultilization plan. However, the just released WARC agenda does not allow for the discussion of the definition of amateur radio and discussion will be restricted only to the frequency tables. United States broadcasters want portions of 160, 75 and 40 meters. The Canadian DOT is requesting 1605 to 4000kHz exclusively for maritime service.

Governor Brown of California is expected to sign AB1126 which will require the permanent identification of consumer electronic gear valued at \$50 or more.

The increasing growth of amateur radio novice ranks has created some FCC problems. They are out of answer sheets and some exams are being received with blank pages. Some answer sheets are being used a second time after careful erasing; and examiners are asked to return exams with blank pages in order to obtain a new exam. The Government Printing Office will soon have a new supply of answer sheets to the FCC.

Two-letter calls will be available October 1 to holders of the Extra Class license who were licensed prior to November 22, 1967. The ARRL will publish an updated list of available two-letter calls in late September. Send an SASE with 24¢ postage to ARRL headquarters for a copy, or contact W6EJJ to find out which calls are still available.

The personal communications show will be held November 10 - 14 at the Los Angeles Convention Center. Aimed at members of the general public interested in communications and electronics (CB, amateur, computers, etc.) it will be an excellent opportunity to publicize amateur radio before a large audience. The Los Angeles Council of Radio Clubs will sponsor an amateur radio exhibit with support to be requested from member clubs.

U.S. Licensed Amateurs. Our numbers continue to rise. July figures from the FCC indicate:

Extra.....	15,007
Advanced.....	69,445
General.....	80,600
Conditional.....	25,449
Technician.....	50,798
Novice.....	<u>30,045</u>
Total.....	274,769

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FCC ANNOUNCES CHANGE IN ISSUANCE OF  
NOVICE CLASS AMATEUR RADIO CALL SIGNS

The FCC has ceased issuing distinctive call signs to Novice Class Amateur radio stations. Presently, Novice Class stations in the continental United States are issued call signs prefixed by the letters "WN" to facilitate their identification as Novice stations. Novice stations outside the continental United States are also assigned distinctive call signs. This practice has proved to be unsatisfactory, however. It has caused several difficulties in the processing of Amateur applications, not the least of which are the issuance of the same call sign to two different stations and the issuance of call signs in call-sign blocks, such as "WC", which are not available for general Amateur use. Accordingly, beginning October 1, 1976, each Novice call sign will be assigned in accordance with the following:

Present Prefix	New Prefix
WNØ	WBØ *
WN1	WB1
WN2	WD2
WN3	WB3
WN4	WD4
WN5	WB5 *
WN6	WD6
WN7	WB7
WN8	WD8
WN9	WB9 *
WH6	KH6
WL7	KL7
WP4	KP4
WP6	KP6
WG6	KG6
WS4	KS4
WS6	KS6
WV4	KV4
WW6	KW6
WJ6	KJ6

\* Call signs in these areas are presently nearing the end of the WB series. After "WB" prefixes are depleted, "WD" call signs will be issued.

All Amateur Novices with license expiration dates of October 1, 1976 or later will be issued new Novice licenses in the near future. Such new licenses will be identical to the licenses superseded, except that they will have the new prefix.

from the Wheaton Community ARC

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QUIZ

Calls are generally of the form 1X3 or 2X3. How many letter combinations does a set of that nature represent, assuming you don't throw out any objectional combinations?

Answer: 17,576 different call signs.

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FOR SALE CORNER . . .

Novice Ham equipment. HW-16 Heath Transceiver (CW)  
HG-10 VFO

Contact Jim Brown, WB6BZW  
(714) 557-5195 in the evening

• • • • •  
Full Swan station (includes 500CX). Complete teletype  
station (includes model 28)

Contact Jerri Cooper, WA6QFO  
(714) 894-1203

• • • • •  
Atlas 180+ AC power supply.

Contact Fried Heyn, WA6WZO  
(714) 549-8516

ORANGE COUNTY AMATEUR RADIO CLUB , INC.

POST OFFICE BOX 95

ORANGE, CALIFORNIA 92668

VOL. XVII, NO. 10-- OCTOBER 1976

FIRST CLASS MAIL !!!

DATED MATERIAL !!!